

Amendments to the Specification

Please amend paragraph [0010], on page 13 starting at line 10 to correct a numbering error:

In this example, optical fibers 10, 12 and 14 are coupled through ~~BBCs 3, 7 and 15~~ BBCs 3, 6 and 15 on the top surface of the photonic-electronic circuit.

Please amend paragraph [0010], line 2 on page 14 to correct a numbering error:

In the example illustrated in Fig. 1, ~~BBCs 3, 7 and 15~~ BBCs 3, 6 and 15 are grating couplers.

Please amend paragraph [0011], line 7 on page 15 to correct a numbering error:

~~received through BBC 15~~ received through BBC 3 and transmitted via Si-SiO_x optical waveguides to
AWG

Please amend paragraph [0012], on page 15 starting at line 17 to correct a numbering error:

For example, on-chip photonic waveguide elements guide optical signals from ~~BBC 7 to demultiplexer 5, from demultiplexer 5~~ BBC 6 to demultiplexer 7, from demultiplexer 7 to detectors in detector array 9, from BBC 3 to demultiplexer 13,

Please amend paragraph [0020], on page 25 starting at line 2 to correct a typographical error:

In this example, after the current invention, multi-wavelength, unmodulated optical power is carried to chip 200 on a single fiber (not shown), split and used to power both Optical Bus I/O blocks 203 and 204 ~~206 and 208~~;

Please amend paragraph [0022], on page 27, line 6 to correct a typographical error:

multiwavelength optical signal is demultiplexed into a N wavelengths at demultiplexer

Please amend paragraph [0023], on page 27, line 17 to correct a typographical error:

multiwavelength optical power source is demultiplexed into a N wavelengths at

Please amend paragraph [0023], on page 28, starting on line 3 to correct a typographical error:

multiplexed at multiplexer 361 for transfer off-chip on ~~an~~ a multi-wavelength optical fiber.

Please amend paragraph [0024], on page 28, line 10 to correct a typographical error:

In this example, a multiwavelength optical signal is demultiplexed into a N